

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0013] on page 5 of the Specification with the following:

[0013] FIG. 1 illustrates a mobile station registration procedure upon detection of a tracking area change in accordance with the exemplary embodiments of the present invention.

[0013.1] FIG. 2 is a flow chart describing an example embodiment of an operating method.

[0013.2] FIG. 3 illustrates a mobile station registration update message sent in response to an overhead message including an indicator value according to an example embodiment.

Please amend paragraph [0019] on page 6 of the Specification as follows:

[0019] The network classifies groups of sectors into what are referred hereafter as 'tracking areas' as shown by S1 in FIG. 2. Tracking areas may be understood as one or more groups of sectors, or a collection of groups of sectors, where each sector may contain users that subscribe to BCMCS content as shown by S2 in FIG. 2. Classifying groups of sectors into tracking areas may enable mobile stations to be accurately tracked, without wasting radio resources, as the mobile stations move across the network. This may provide benefits, both in terms of paging, as well as for efficiently assigning radio resources for BCMCS.

Please amend paragraph [0022] on page 7 of the Specification as follows:

[0022] Non-overlapping groups of sectors are classified into BCMCS tracking areas. A system overhead message, commonly referred to as 'Broadcast Service Parameters Message' is transmitted by each sector and indicates whether or not tracking area updates are required for one or more designated users in the sector as shown by S3 in FIG. 2. This may be achieved, for example, by including a single "Tracking Area Update Enabled Indicator" (TAUEI) bit in the system overhead of the sector. This bit may be set to '0' to represent that tracking area updates are disabled for the sector and set to '1' to indicate that tracking area updates are enabled for the sector.

For example, the network may disable tracking area updates by setting TAUEI to '0' within the interior of a tracking area and enable tracking area updates in sectors on a boundary between two or more tracking areas by setting this bit to '1'. The network may also use this bit to disable tracking area updates if it determines that the uplink is overloaded.

Please amend paragraph [0024] on page 8 of the Specification as follows:

[0024] BCMCS idle mobile stations moving across tracking area boundaries may provide tracking area registration updates, for example as shown by S4 in FIG. 2, to the network upon expiration of a configurable minimum time interval, T_{reg} , if one of the following conditions hold:

- (a) At least one of the M strongest sectors (highest pilot channel signal strength) that have satisfied the adding criteria, but have not yet been dropped, belongs to a different tracking area, as compared with the previous reporting instance; or
- (b) If pilot strengths from all sectors belonging to a tracking area that was previously reported satisfy the dropping criteria (exceed T_{DROP}).

Please amend paragraph [0027] beginning on page 8 and ending on page 9 of the Specification as follows:

[0027] A BCMCS active mobile station that detects a change in tracking area sends a registration only if it determines that a BCMC group call (i.e., the flow(s) of IP packets containing communications directed to members (users) of the multicast group) it is interested in monitoring is not already assigned radio resources in one or more of the M strongest sectors, for example as shown by S4 in FIG. 2. The BCMCS active mobile may determine this by decoding system overhead messages from each candidate sector that satisfies the aforementioned adding criteria. Alternatively, the strongest serving sector can include such neighbor sector information (e.g. physical channel configuration etc.) for each group in its overhead where it can be obtained by the BCMCS active mobile.